Consumer Price Index (CPI): September 2019
(Release date: 20 November 2019)

The consumer price index in September 2019 increased by 2.49 percent from September 2018. This means, on average, the consumers are paying 2.49 percent more than what they paid in September 2018 for the goods and services in the CPI basket. The rate was 0.2 percentage point lower than the change recorded in the same month of previous year (2.7 percent) and 0.29 percentage point lower than previous month of August 2019 (2.78 percent).
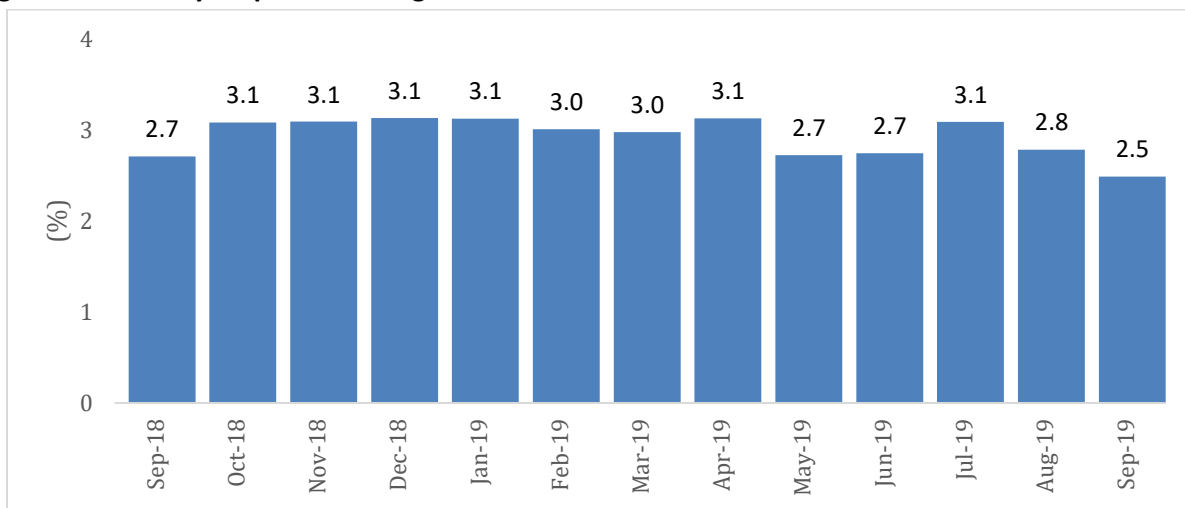
Figure 1: Year-on-year percent change

Table 1: Year-on-year index and percent change by Division

Division	Weight (%)	Index (April 2019=100)						% Change		
		Jul-18	Aug-18	Sep-18	Jul-19	Aug-19	Sep-19	Jul-19	Aug-19	Sep-19
All item	**100.0**	**97.02**	**97.50**	**97.96**	**100.02**	**100.21**	**100.40**	**3.09**	**2.78**	**2.49**
Food	**45.9**	**96.12**	**96.21**	**96.63**	**99.59**	**99.90**	**99.99**	**3.61**	**3.84**	**3.48**
Food and non-alcoholic beverages	42.8	95.91	95.96	96.41	99.58	99.92	100.00	3.83	4.13	3.71
Alcoholic beverages and betel nuts	3.2	98.75	99.26	99.30	99.76	99.66	99.93	1.02	0.40	0.64
Non-food	**54.1**	**97.63**	**98.37**	**98.86**	**100.38**	**100.48**	**100.75**	**2.82**	**2.14**	**1.91**
Clothing and footwear	9.2	98.21	98.79	99.10	100.39	100.39	100.39	2.21	1.62	1.30
Housing and utilities	11.6	97.16	98.54	98.84	100.55	100.56	100.57	3.49	2.05	1.75
Furnishings, household equipment and routine household maintenance	4.4	97.58	98.40	98.76	101.17	101.17	104.80	3.68	2.82	6.12
Health	0.8	96.88	96.88	99.10	100.02	100.02	100.02	3.24	3.24	0.93
Transport	15.6	97.48	97.75	98.31	100.19	100.50	100.44	2.78	2.82	2.16
Communication	3.2	99.69	99.83	99.83	100.08	100.08	100.08	0.39	0.25	0.25
Recreation and culture	2.3	99.48	99.60	99.84	100.04	100.04	100.04	0.56	0.44	0.21
Education	1.3	100.00	100.00	100.00	101.28	101.28	101.28	1.28	1.28	1.28
Restaurants and hotels	3.6	93.17	95.38	96.65	100.02	100.02	100.02	7.34	4.86	3.48
Miscellaneous goods and services	1.9	98.39	98.70	98.73	100.33	100.33	100.33	1.96	1.64	1.61

Figure 2: Percent contribution to inflation by Division

Legend:
- Miscellaneous goods and services
- Education
- Communication
- Health
- Housing, water, electricity, gas and other fuels
- Alcoholic beverages, tobacco and narcotics
- Restaurants and hotels
- Recreation and culture
- Transport
- Furnishings, household equipment and routine household maintenance
- Clothing and footwear
- Food and non-alcoholic beverages
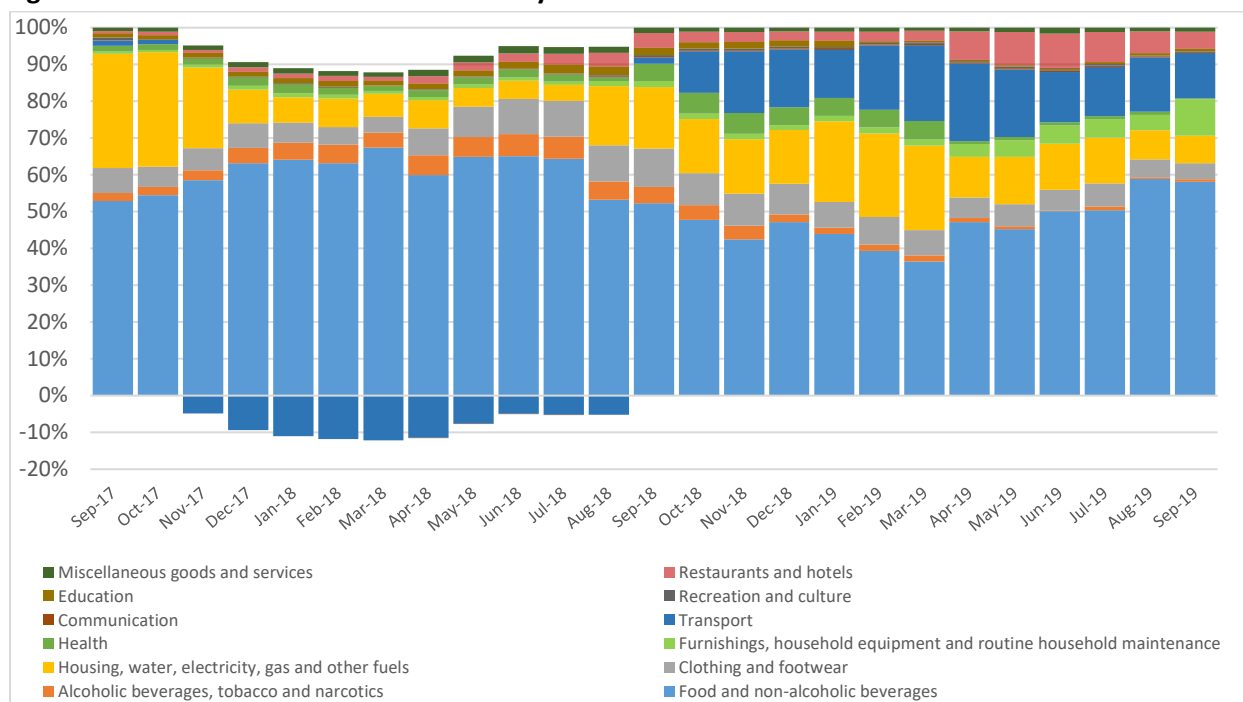
Table 2: Month-on-month index and percent change by Division

Division	Weights (%)	Index (April 2019=100)					% Change			
		May-19	Jun-19	Jul-19	Aug-19	Sep-19	Jun-19	Jul-19	Aug-19	Sep-19
All item	**100.0**	**99.80**	**99.65**	**100.02**	**100.21**	**100.40**	**-0.15**	**0.37**	**0.19**	**0.19**
Food	**45.9**	**99.45**	**99.12**	**99.59**	**99.90**	**99.99**	**-0.33**	**0.48**	**0.31**	**0.09**
Food and non-alcoholic beverages	42.8	99.47	99.15	99.58	99.92	100.00	-0.32	0.44	0.34	0.08
Alcoholic beverages and betel nuts	3.2	99.23	98.77	99.76	99.66	99.93	-0.47	1.00	-0.10	0.28
Non-food	**54.1**	**100.09**	**100.10**	**100.38**	**100.48**	**100.75**	**0.01**	**0.28**	**0.09**	**0.27**
Clothing and footwear	9.2	100.00	99.99	100.39	100.39	100.39	-0.01	0.40	0.00	0.00
Housing and utilities	11.6	100.01	100.03	100.55	100.56	100.57	0.02	0.52	0.01	0.01
Furnishings, household equipment and routine household maintenance	4.4	100.34	100.60	101.17	101.17	104.80	0.26	0.56	0.00	3.59
Health	0.8	100.00	100.00	100.02	100.02	100.02	0.00	0.02	0.00	0.00
Transport	15.6	100.22	100.06	100.19	100.50	100.44	-0.16	0.13	0.31	-0.07
Communication	3.2	100.00	100.00	100.08	100.08	100.08	0.00	0.08	0.00	0.00
Recreation and culture	2.3	100.00	100.00	100.04	100.04	100.04	0.00	0.04	0.00	0.00
Education	1.3	100.00	100.00	101.28	101.28	101.28	0.00	1.28	0.00	0.00
Restaurants and hotels	3.6	100.00	100.01	100.02	100.02	100.02	0.01	0.01	0.00	0.00
Miscellaneous goods and services	1.9	100.00	100.83	100.33	100.33	100.33	0.83	-0.50	0.00	0.00

Figure3: Purchasing Power of Ngultrum (PPN)
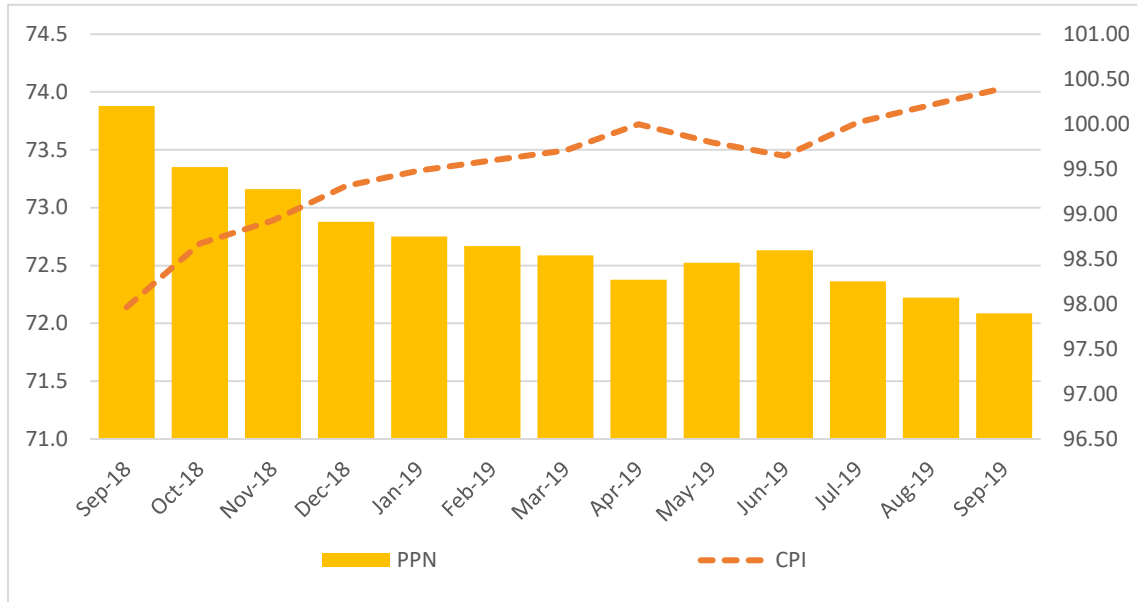
The purchasing power of ngultrum as measured by CPI is Nu.72 as of September 2019. This means, Nu. 100 in September 2019 is worth only Nu.72 at December 2012 price. The PPN dropped by 2.43 percent in the past 12 months (from September 2018 to September 2019) due to price increase in the economy.

Technical notes

Concept and Definition of CPI

The Consumer Price Index (CPI) is a measure of average price changes in the basket of goods and services purchased by households over time. It shows how much, on average, prices of goods and services have increased or decreased from a particular reference period, commonly known as the Index reference.

Scope and coverage

The CPI covers the goods and services consumed by the households and a sample of goods and services are selected using the household expenditure data to measure the inflation experienced by the households. Prices of the sampled goods and services are collected from urban areas in 20 Dzongkhags on monthly, quarterly and annual frequency depending on the price volatility of the items. The outlets for data collection are selected based on purposive sampling considering the popularity of the outlet and availability of the items.

CPI baskets has a total of 113 items (314 varieties) classified according to Classification of Individual Consumption According to Purpose (COICOP). Total of about 450 outlets are selected for pricing.

Weights

Weights reflect the relative importance or share of the individual item to the total consumption expenditures of the households. It determines the impact an individual item will have to the overall inflation. Weight for the current CPI is derived using the household consumption expenditure data from the Bhutan Living Standard Survey (BLSS) conducted every five years. The current weight is based on BLSS 2017.

Price reference and index reference

Price reference is the period for which the prices are used as denominator for the index calculation. The price reference period for CPI is April 2019.

Index reference period is the period for which the index is set as 100. The index reference period is April 2019.

Index Calculation Formula

Geometric Modified Laspeyres formula is used to calculate the CPI:

$$P_{GYo} = \prod_{i=1}^{n} \left(\frac{P_i^t}{P_i^0} \right)^{s_i^b}$$

S_i^b = Expenditure Shares of the Base Period (weight from BLSS)

P_i^t = Current Period Price

P_i^0 = Previous Period Price

$\left(\dfrac{P_i^t}{P_I^0} \right)$ = Price Relatives

Calculating Percent Changes

Month-on-month percent change measures the average price change between current month and previous month and serves as useful indicator of short-term price movement.

Year-on-year percent change measures the average price change between the specific month with that of the same month of the previous year.

Following is an example of computing index point and percent changes:

- Index point change

All item price index	104.50
Less previous price index	101.25
Equals index point change	3.25

- Index percent change

Index point change	3.25
Divided by Previous Price Index	101.25
Equals	0.032
Result multiplied by 100	0.032 x 100
Equals percent changes	3.2

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